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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,733	03/15/2002	Cameron D. Hinman	2263P	4218

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EXAMINER

DONG, DALEI

ART UNIT PAPER NUMBER

2875

DATE MAILED: 11/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicant No.

10/099,733

Applicant(s)

HINMAN, CAMERON D.

Examiner

Dalei Dong

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## **DETAILED ACTION**

### ***Drawings***

1. New corrected drawings are required in this application because the drawing are difficult to decipher and are drawn by hand. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1-4, 11-32, 35-37 and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,398,295 to Chang.

Regarding to claims 1-4, 11-32, 35-37 and 42-50, Chang discloses in Figures 1 and 2, "each half 12 has a main plate 14 from which a (first) left side wall 16 and a (second) right side wall 18 extend vertically at two opposite side edges. Along the center line of the main plate 14, a central slot 20 extends rearward from the front edge and terminates at approximate two thirds of the distance dimension in a front-to-end direction" (column 2, lines 46-52).

Chang also discloses in Figures 1 and 2, "the main plate 14 and beside the central slot 20, a pair of opposite (third and fourth) auxiliary walls 26, 28 extend vertically in the same direction as the side walls and opposite to the right and the left side walls 16, 18, respectively. Certainly, a space S is formed between these two auxiliary walls 26 and 28 wherein the horizontally planar dimension of such space S is generally equal to that of the slot 20. A first cavity 22 is formed between the left side wall 16 and the opposite auxiliary wall 26. Similarly, a second cavity 24 is formed between the right side wall 18 and another auxiliary wall 28 opposite thereto" (column 2, lines 53-64).

Chang further discloses in Figures 1 and 2, "a (fifth) rear wall 30 extends from the rear edge of the main plate 14 vertically in the same direction with the right side wall 18 and the left side wall 16. A pair of generally semi-circular openings 32, 34 are positioned in the rear wall 30 in alignment with the first cavity 22 and the second cavity 24, respective" (column 2, line 65 to column 3, line 2).

Chang further yet discloses in Figures 1 and 2, "a stopper 36 vertically extending from the main plate 14 in the same direction with the side walls 16 & 18, is disposed between the rear wall 30 and the auxiliary wall 28 in the condition that the stopper 36 is

generally aligned with the auxiliary wall 28 in the front-to-end direction" (column 3, lines 3-8).

Chang further yet teaches in Figures 1 and 2, "a latch 38 projects vertically from the top surface of the left wall 16 with an integral hook 40 at the end. Correspondingly, a catch 42 is positioned in the outer side portion of the right side wall 18 with an integral corresponding hook 44 for latchable reception of the latch 38 therein" (column 3, lines 9-14).

Chang further yet discloses in Figures 1 and 2, "the side walls 16, 18 and the auxiliary walls 26, 28 have tapered sections 16A, 18A, 26A and 28A on the front portion and shoulder or converging sections 16B, 18B, 26B and 28B on the rear portion, respectively" (column 3, lines 15-19).

Chang further yet discloses in Figures 1 and 2, "the subject duplex clip 10 is adapted to latchable secure a pair of SC type optical fiber connectors 50 therein in a side-by-side arrangement. Different from the SC type optical fiber connector disclosed in the aforementioned prior art U.S. Pat. Nos. 4,953,929 and 5,123,071, the housing 52 of the connector 50 in the present invention has a converging section 54 and a successive diverging section 56 approximate to the rear portion of each of two opposite (left and right) sides. This specific configuration of the connector 50 is to conform to the tapered sections 16(A), 18(A), 26(A), 28(A), and the shoulder sections 16(B), 18(B), 26(B), 28(B) of the subject duplex clip 10 in the present invention" (column 3, lines 20-33).

Chang further yet discloses in Figures 1 and 2, "when assembled, these two connectors 50 can be respectively loaded into the first cavity 22 and the second cavity 24

of the bottom half 12 from the top wherein the converging sections 54 of the housings 52 respectively confront the tapered sections 16(A), 18(A), 26(A) and 28(A) of the corresponding side walls 16, 18 and the auxiliary walls 26, 28 of the bottom half 12, and the diverging sections 56 of the housings 52 respectively confront the shoulder section 16(B), 18(B), 26(B) and 28(B) of the corresponding side walls 16, 18 and the auxiliary walls 26 and 28 of the bottom half 12. Thus, the connectors 50 in the corresponding cavities 22 and 24 can not move with regard to the bottom half 12 in a left-to-right or lateral direction" (column 3, lines 34-47).

Chang further yet discloses in Figures 1 and 2, "the rear section 58 of the connector 50 loaded in the first cavity 22 is naturally sandwiched between the rear wall 30 and the shoulder sections 16(B) of the left side wall 16 and the shoulder section 26(B) of the auxiliary wall (26). Similarly, the rear section 58 of the connector 50 loaded in the second cavity 24 is naturally sandwiched between the rear wall 30 and the shoulder section 18(B) of the right side wall 18 and the shoulder section 28(B) of the auxiliary wall (28). Thus, the connectors 50 in the cavities 22 and 24 can not move with regard to the bottom half in the front-to-end or lengthwise direction" (column 3, lines 48-59).

Chang finally discloses in Figures 1 and 2, "the top half 12 is vertically aligned and fastened to the bottom half 12 by means that the latch 38 of the top half 12 is latchable captured in the catch 42 of the bottom half 12 and the latch 38 of the bottom half 12 is latchable captured in the catch 42 of the top half 12. The top half 12 incorporates the corresponding connectors 50 in the same way as the bottom half 12 does, and such details are not illustrated herewith. Accordingly, the top surface and the bottom

surface of the connector 50 respectively confront the main plate 14 of the top half 12 and the main plate 14 of the bottom half 12, thus preventing such connector 50 from vertical movement within the clip 10. Because the connectors 50 is restrained in three dimensional (i.e. lengthwise, lateral and vertical) directions as aforementioned, such connectors 50 can be securely retained in the clip 10 without any risk of removal therefrom" (column 3, line 60 to column 4, line 8).

However, Chang does not disclose a second snap coupled to a second side face of the first portion. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the second snap couple to the second side face of the first portion, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

5. Claims 5-6 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,398,295 to Chang in view of U.S. Patent No. 5,577,150 to Holder.

Regarding to claims 5-6 and 33-34, Chang discloses the claimed invention except for opening traversing from top surface to the bottom surface of the first portion and the second portion of the harness. Holder teaches in Figure 2, "the central land area 52 of the second member 20 has a pilot hole 56 to receive a thumbscrew 58 which extends through the second member 20 and into the threaded aperture 44 to releasably join the first member 18 and the second member 20. The pilot hole 56 in the second member 20 is countersunk to seat a spring 60 allowing the first member 18 and the second member 20 to be completely engaged without interference from the spring 60. When the first

member 18 and the second member 20 are separated, the spring 60 is held in the countersunk pilot hole 56 in the second member 20. The spring 60 biases the first member 18 and second member 20 apart when the thumbscrew 58 is loosened" (column 5, lines 43-55).

Holder also teaches in Figure 2, "once the cutting blades 22 have been mounted in the cutting blade recesses 38, the tool 10 is ready to be used. First, the outer sheath of the cable (not shown) is opened to expose the plurality of buffer tubes 16. The single buffer tube 14 to be accessed is unwound from the cable and measured in the large sizing slot 34a, small sizing slot 34b and minimal sizing slot 34c to determine if the tool 10 can be used, and if so, which of the hourglass shaped through bores 50 can be used. Upon loosening the thumbscrew 58, the first member 18 and the second member 20 are at least partially separated under the biasing action of the spring 60. The buffer tube 14 is then aligned with and placed into one of the parallel grooves 46, 48 of the second member 20. Tightening the thumbscrew 58, draws the first member 18 and the second member 20 together, causing the cutting blades 22 to pierce the buffer tube 14 to the pre-defined depth. The tool 10 is then drawn along the buffer tube 14 in the direction of an arrow 66 (FIGS. 1, 2 and 4) to remove a chord 14a of buffer tube 14, which is discharged out the top of the tool 10 thereby exposing the optical fibers 12 contained within. The hourglass shaped through bores 50 allow the buffer tube 14 to easily slide through the tool 10. Any bends in the buffer tube 14 are easily accommodated by the gradual tapered shape of the bores 50, without the buffer tube 14 binding or jamming in the tool 10. After the desired amount of the buffer tube 14 has been removed, the thumbscrew 58 is loosened and the



first member 18 separated from the second member 20 to free the buffer tube 14”  
(column 6, lines 7-33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the pilot hole or opening of Holder for the harness or assembly of Chang in order to access the optical fibers or subassemblies contained in the harness with low pulling resistance and minimal intrusion into the harness.

6. Claims 7-10 and 38-41 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,398,295 to Chang in view of U.S. Patent No. 5,125,057 to Aberson.

Regarding to claims 7-9, 38-40, Chang discloses the claimed invention except for a clip. Aberson teaches in Figures 1 and 2, “an optical fiber splicing device which is designated generally by the numeral 20. The optical fiber splicing device 20 includes a housing designated generally by the numeral 22, a capillary tube member designated generally by the numeral 24 and a clamping member designated generally by the numeral 26 (see also FIGS. 2 and 3). The optical fiber splicing device 20 is adapted to provide a splice connection between two optical fibers 30--30 (see FIG. 4)” (column 3, lines 59-66).

Aberson also teaches in Figures 1 and 2, “the clamping member 26 (see FIGS. 1 and 2) is adapted to span across the slotted portion 86 of the capillary tube member 24 to maintain the exposed end portions of the optical fibers 30--30 in butted alignment with each other. In a preferred embodiment, the clamping member 26 is an energy storage device such as a spring member which is made of a metallic material, such as, for

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example, spring steel. The clamping member 26 comprises a clamping portion 91 having a depressed center portion 92 and two lateral portions 93--93. From the end of each lateral portion 93 extends inwardly a toothed portion 94. Also, an underside center portion of the clamping portion 91 is provided with a strip 96 of a compliant material" (column 5, lines 44-57).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the clamp or clip of Aberson for the harness or assembly of Chang in order to achieve easy, securely and reliably mounting of the subassemblies to the housing.

Regarding to claims 10 and 41, it is old and well known in the art to utilize spring as a securing means, and therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize a spring member to secure the desired device.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of composition of a harness device.

U.S. Patent No. 5,528,408 to McGinley.

U.S. Patent No. 5,757,998 to Thatcher.

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U.S. Patent No. 5,966,487 to Gilliland.

U.S. Patent No. 6,499,890 to Gilliland.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (703)308-2870. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703)305-4939. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

D.D.  
October 28, 2003

A handwritten signature in black ink, appearing to be 'Dalei Dong', with a long horizontal flourish extending to the right.